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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM D. SCOTT

Appeal 2007-4543
Application 10/694,073
Technology Center 3700

Decided: January 15, 2008

Before DONALD E. ADAMS, ERIC GRIMES, and JEFFREY N.
FREDMAN, *Administrative Patent Judges*.

FREDMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a hot tub cover, which the Examiner has rejected on grounds of obviousness. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

BACKGROUND

“[I]t is desirable to cover the open top of a spa or hot tub. A conventional cover typically includes a foam material that is covered with fabric” (Specification 1). The Specification discloses that covers often have

“two separate halves capable of folding together to aid in removal of the cover” (Specification 1).

Appellant teaches “a cover for a hot tub or spa [that] includes a structural, non-water absorbing plastic core” (Specification 2). Appellant also teaches “the plastic core is ribbed to provide increased load bearing capabilities. The ribs improve the static load capabilities of the cover, and resist sagging” (Specification 2).

STATEMENT OF THE CASE

The Claims

Claims 1, 2, and 4-9 are on appeal. Claims 1 and 6 were separately argued. The remaining claims have not been argued separately and therefore stand or fall together with the claim from which they depend. 37 C.F.R.

§ 41.37(c)(1)(vii). We will focus on claims 1 and 6, which are representative and read as follows:

1. A cover for a hot tub or spa, comprising:
 - a structural, non-water absorbing, plastic core, a portion of said core being a single piece of plastic, said portion including upper and lower walls spaced from one another and a plurality of spaced ribs extending between said upper and lower walls, said spaced ribs defining a plurality of openings therebetween; and
 - a water resistant jacket enclosing said core.

6. A cover for a hot tub or a spa, comprising:
 - a polymeric core, a portion of said core being a single unitary piece, said portion including an upper wall and a lower wall, said upper wall having a central portion and an outer edge, said upper wall sloping downwardly from said central portion to said outer edge, said core further including a plurality of ribs extending between said upper and lower walls; and
 - a water resistant jacket enclosing said core.

The Examiner has rejected claims 1, 2, and 4-9 under 35 U.S.C. § 103(a) based on:

Christopher, U.S. Patent 5,086,525, February 11, 1992 (hereafter “Christopher”).

Kawamura, U.S. Patent 3,274,315, September 20, 1966 (hereafter “Kawamura”).

Edgar, U.S. Patent 3,697,633, October 10, 1972 (hereafter “Edgar”).

§ 103(a) rejection over Christopher and Kawamura

The Examiner’s position is that

Christopher indicates the need for a spa cover having an insulative, strong core. . . . And, Kawamura teaches how to make an insulative and strong plastic core which is also lightweight (at least when provided with hollow openings). Clearly, Kawamura is pertinent to the problem faced by Christopher in providing an insulative, strong core.

(Answer 6).

The Appellant contends: “Nothing, other than impermissible hindsight, suggests that the synthetic resin article of Kawamura could be substituted into a hot tub cover for the polystyrene core of Christopher in an attempt to address the problems solved by the present invention” (App. Br. 5). The Appellant further argues that “Kawamura has nothing to do with hot tub covers” (App. Br. 6). Appellant “submits that no person skilled in the art of designing and/or fabricating hot tub covers would look to the art of packaging or insulation for a solution to the problem addressed by the present invention” (App. Br. 6).

In view of these conflicting positions, we frame the anticipation issue before us as follows:

Would an ordinary artisan have had reason to use the synthetic resin board of Kawamura as the rigid insert in the hot tub cover of Christopher?

Findings of Fact

1. Christopher teaches a spa cover with a water resistant jacket (Christopher, col. 1, ll. 14-19).
2. Christopher teaches that the spa cover has a rigid material inside the jacket (Christopher, col. 3, ll. 34-49).
3. Kawamura teaches a rigid single piece of plastic that has spaced ribs between upper and lower walls (Kawamura, fig. 1 and col. 2, ll. 53-72).
4. Kawamura teaches that the synthetic resin articles “can be employed for many purposes, for example, as packing, insulation, construction material, decorations and other applications; because of the excellent sound-absorbing, damp-proofing, shock-absorbing and adiabatic properties of the finished resin products, they provide many advantages in their practical applications” (Kawamura, col. 7, ll. 7-12).

Discussion of claims 1 and 6

The difference between the Christopher spa cover and the spa cover of claims 1 and 6 is the substitution of a ribbed plastic core for the polystyrene of Christopher. Christopher teaches a spa cover with structural cores covered with a water resistant jacket (FF 1-2). Kawamura teaches plastic resin boards composed of a single piece of plastic which include spaced ribs with openings (FF 3).

Based upon the Examiner's findings and the findings of fact, we conclude that claims 1 and 6 would have been obvious to an artisan of ordinary skill (*see* FF 1-4). The article of claims 1 and 6 substitutes the plastic resin board of Kawamura for the polystyrene used by Christopher.

We reject Appellant's argument that there is no motivation to combine the plastic resin board of Kawamura with the spa cover of Christopher. The Federal Circuit has recognized that

an implicit motivation to combine exists not only when a suggestion may be gleaned from the prior art as a whole, but when the "improvement" is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient.

DyStar Textilfarben v. C.H. Patrick Co., 464 F.3d 1356, 1368 (Fed. Cir. 2006).

Christopher expressly teaches that the spa cover must function to reduce heat loss and prevent accidental falls into the spa (*see* Christopher, col. 1, ll. 25-33). This statement by Christopher implicitly suggests that materials used in the spa cover should achieve the goals of reducing heat loss and preventing accidental entry into the spa (*see* Christopher, col. 1, ll. 25-33). Kawamura teaches a plastic resin board that "can be employed for . . . insulation, construction material . . . because of the excellent sound-absorbing, damp-proofing, shock-absorbing and adiabatic properties" (Kawamura, col. 7, ll. 7-12). Kawamura provides several specific advantages for the plastic resin board which fulfill the goals set forth by Christopher for a spa cover (FF 4). The capacity of Kawamura's resin

board to insulate will prevent heat loss as desired by Christopher while the suggested use of the resin board as a construction material by Kawamura suggests that the material will be sufficiently strong to prevent accidental falls through a spa cover using the resin board as the rigid material (*see* FF 1-4).

Therefore, there is arguably explicit motivation, and certainly implicit motivation, to improve the spa cover of Christopher by using the resin board of Kawamura as the rigid core in order to obtain the benefits of a damp proof core that can be employed as insulation and as a construction material (FF 4).

Further, in *KSR*, the Supreme Court indicated that “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740 (2007).

Here, where Kawamura teaches a plastic resin board which would predictably satisfy the functional requirements of a rigid core in the spa cover of Christopher, we conclude that substituting the plastic resin board of Kawamura for the polystyrene core in Christopher results in a predictable variation that is obvious.

We also reject Appellant’s argument that the “synthetic resin article disclosed by Kawamura is from a nonanalogous art” (App. Br. 6). In *Icon*, the Federal Circuit explained that

“A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it

is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." In *re* Clay, 966 F.2d 656, 659 (Fed.Cir.1992). In other words, "familiar items may have obvious uses beyond their primary purposes." *KSR Int'l Co. v. Teleflex, Inc.*, --- U.S. ---, 127 S.Ct. 1727, 1742 (2007). We therefore have concluded, for example, that an inventor considering a hinge and latch mechanism for portable computers would naturally look to references employing other " housings, hinges, latches, springs, etc.," which in that case came from areas such as "a desktop telephone directory, a piano lid, a kitchen cabinet, a washing machine cabinet, a wooden furniture cabinet, or a two-part housing for storing audio cassettes." Paulsen, 30 F.3d at 1481-82.

In re ICON Health and Fitness, Inc., 496 F.3d 1374, 1379-1380 (Fed. Cir. 2007).

Kawamura expressly teaches that the plastic resin board can be used in applications ranging from packing and insulation to construction and that the resin is damp proof and adiabatic (FF 4). In creating a spa cover, the determination is to identify rigid materials which would logically have come to the attention of the ordinary artisan for use as supports as required by Christopher (*see* FF 1-2). We find that just as other references employing hinges would have been relevant to a portable computer maker interested in a hinge mechanism, references teaching superior damp proof, insulating and rigid construction materials would have been relevant to an ordinary artisan designing a spa cover composed in part of a rigid material that was desirably damp proof, strong and insulating. We therefore conclude that Kawamura is analogous art and is properly applied in the obviousness rejection.

Based on our interpretation and findings and those of the Examiner, Christopher and Kawamura would have rendered obvious the invention of claims 1 and 6. Thus, we conclude that the invention of claims 1 and 6 are obvious under 35 U.S.C. § 103(a) based on Christopher and Kawamura.

CONCLUSION

In summary, we affirm the rejection of claims 1 and 6 under 35 U.S.C. § 103(a). Pursuant to 37 C.F.R. § 41.37(c)(1)(vii)(2006), we also affirm the rejection of claims 2, 4, 5, and 7-9 under 35 U.S.C. § 103(a) as these claims were not argued separately.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

Ssc:

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